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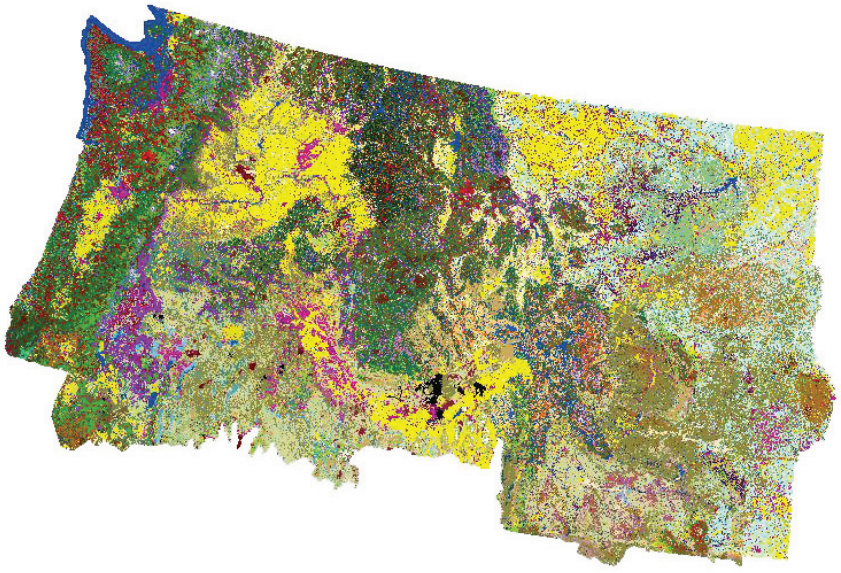
Gap Analysis Program Produces New Land Cover Maps

One of GAP's key functions is to develop regional-scale maps of general habitat types delineated from satellite imagery.



Land cover of the Northwest

The Gap Analysis Program (GAP) <gapanalysis.nbii.gov> recently produced two new land cover maps: one for a five-state region of the Northwestern United States and a second for California. With the completion of these maps, GAP is making significant progress towards its goal of having one seamless national land cover map by the end of 2009.

One of GAP's key functions is to develop regional-scale maps of general habitat types delineated from satellite imagery. These land cover maps are used for assessing the conservation status of both individual and communities of species.

Northwest GAP

The Northwest Regional Gap Analysis Project (NWReGAP) is an update of GAP's mapping and assessment of biodiversity for the five-state region encompassing Washington, Idaho, Oregon, Montana, and Wyoming. By the end of 2009, the regional data set will include four primary gap products: land cover, predicted species distribution models, land stewardship, and a gap analysis showing which species and systems are not adequately represented on lands managed for conservation. The new data will facilitate regional analysis and range-wide research projects. The Northwest GAP maps and data can be downloaded from <http://www.gap.uidaho.edu/Northwest/data.htm>.

California ReGAP

The California project is an update of the original state project map which was completed in 1998. The area mapped covers over 94 million acres, approximately 93 percent of the state. The northeastern corner of California was completed as part of the Northwest Regional Gap Analysis Project.

The California land cover map (see side two) can be downloaded from <http://www.gap.uidaho.edu/Portal/California/CAReGAP.html>.

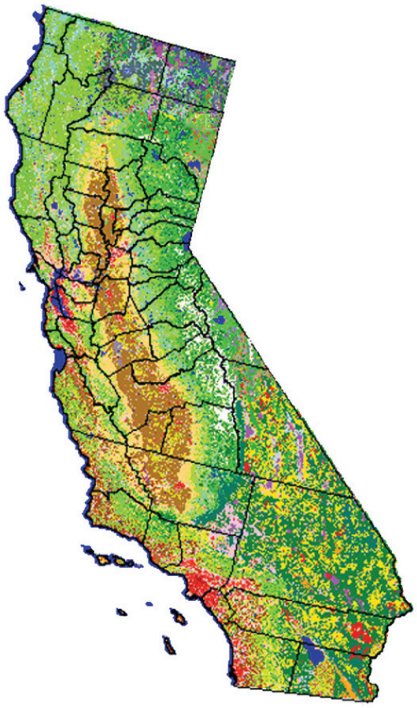
Ecological Systems

Both the Northwest and the California maps were developed using NatureServe's Ecological System ecological classification scheme, the same classification system used in regional GAP projects in the Southwest and Southeast Regional GAP projects. Ecological systems consist of groups of biological communities that are found in similar physical environments. They are designed to be readily mappable from remote imagery and to be identifiable by conservation and resource managers in the field.

Detailed descriptions of the mapped Ecological Systems can be found at <http://www.natureserve.org/explorer/>.

The ecological systems concept has been refined in recent years. All of the United States has now been mapped using the classification system due to the mapping programs funded by GAP and by LANDFIRE.

LANDFIRE is a five-year, shared project between the wildland fire management programs of the U.S. Department of Agriculture Forest Service and the U.S. Department of the Interior. Its goal is to produce consistent and comprehensive maps and data describing vegetation, wildland fuel, and fire regimes across the United States. LANDFIRE data products include layers of vegetation



Land cover of California, Gap Analysis Program, 2009

composition and structure, surface and canopy fuel characteristics, and historical fire regimes.

A map of the country using ecological systems is available at LandScope. This map has incorporated all the data created by GAP in recent years. The Northwest and California maps are major updates to the existing data available from the LandScope America site at <http://www.landscope.org/>.

The GAP mission is to promote conservation by providing broad geographic information on biological diversity to resource managers, planners, and policy makers who can use the information to make informed decisions. GAP activities focus on the creation of state and regional databases and maps that depict broad patterns of land cover, land management, and biodiversity. GAP is administered through the U.S. Geological Survey.

Looking Ahead

GAP is working towards the creation of a suite of national data sets that can be used for conservation planning and natural resources management across the country. These data include:

- a national land cover map,
- a national land stewardship map,
- national vertebrate species ranges, and
- a national gap analysis showing which species and ecological systems are under-represented on conservation lands. literature, state contacts, the status of GAP projects, and specific data availability.

For More Information

To learn more about these GAP activities, contact:

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